



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/800,673	03/08/2001	Craig Howard Doan	011525-273	4837

7590 02/03/2004

Regis E. Slutter
BURNS, DOANE, SWECKER & MATHIS, L.L.P.
P. O. Box 1404
Alexandria, VA 22313-1404

EXAMINER

MADSEN, ROBERT A

ART UNIT	PAPER NUMBER
----------	--------------

1761

DATE MAILED: 02/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/800,673

Applicant(s)

DOAN ET AL.

Examiner

Robert Madsen

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4 and 6-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 2-4 and 6-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 8, 2003 has been entered. Claims 1 and 5 have been cancelled. Claims 15-21 have been added. Claims 2-4,6-21 remain pending in the application.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 3,4, 6,7,9, 10, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hibbs et al. (US 5204133) in view of Manvell (US 4927653) and Hale (US 4957761).
4. Hibbs et al. teach surface pasteurizing by par frying, freezing the par-fried potato pieces, obtaining and storing the frozen par-fried potato pieces in a modified atmosphere package at refrigeration temperatures for at least 60 days, as recited in claim 6, wherein the package is evacuated to remove and add a mixture of nitrogen and carbon dioxide claims 7 and 9, 10, and the potato pieces have an extended shelf life and have a reduced reconstitution time as recited in claim 14 and have less than 1.0log

Art Unit: 1761

CFU /g coliforms as recited in claim 7 (Abstract, See Column 3, lines 18-40, Column 4, line 30 to Column 5, line 24, Column 5, lines 40-43). However, Hibbs et al. are silent in teaching about 5% oxygen, 0-15.0% carbon dioxide, and 0-80% nitrogen as recited in claims 7, 9 and 10, the pieces test negative for *Listeria*, *Salmonella*, *Clostridium botulinum*, *E. coli*, and *Staph. Aureus* as recited in claim 7, the packaging step is completed in a clean room, as recited in claim 7 and 9, by aseptically packaging, as recited in claim 4, or that the surface pasteurizing exits into a clean room as recited in claim 9 where the chilling is also completed as recited in claim 3.

5. With respect to packaging in a clean room after the pasteurizing step, Manvell, who also teaches a method of preparing French fried potato pieces for extended storage without microbial contamination, recognizes it is well known to freeze fried potato pieces to prevent microbial growth during storage, but offers an alternative that provides a longer shelf life of the completed product without freezing (Column 1, lines 9-25, Column 2, lines 25-44, Column 3, lines 40-65). Manvell is relied on as evidence of the conventionality of providing an exit from a sterilizing apparatus (i.e. raises the temperature and removes moisture like Hibbs et al.) into a clean room, or aseptic environment as recited in claim 4 (i.e. sterile gas in Column 4, lines 65-68), wherein the pasteurized fried potato pieces are additionally cooled, as recited in claim 3, and packaged to obtain an extended shelf life, like Hibbs et al., for several weeks or months and with a reduced reconstitution time (Column 2, lines 10-15, Column 4, line 45 to Column 5, line 34, Column 6, lines 9-42, 58-67). Manvell teaches that by using aseptic packaging in a clean room after pasteurizing the flavor is improved (Column 4,

lines 1-30). Manvell further teaches packaging under aseptic condition will assure that all harmful and spoilage organisms are killed, as recited in claim 7, and by aseptically packaging in a modified atmosphere the pasteurized or sterilized condition is maintained during the shelf life (Column 2, lines 25-66). Therefore, it would have been obvious to modify Hibbs et al. and include an aseptic packaging step after the par-frying step such that the par fried pieces are cooled and packaged in a clean room, as recited in claims 3,4, 7,9, and that the pieces test negative for Listeria, Salmonella, clostridium botulinum, E. coli, an staph. Aureus as recited in claim 7, since Manvel teaches included a clean room with cleaning after the par frying or pasteurizing step because it would improve flavor , assure that *all* harmful and spoilage organisms are killed, and maintain the sterilized conditions during the shelf life. One would have been substituting one packaging step for another for the same purpose: extended refrigerated shelf life of potato pieces.

6. With respect to the particular amount of carbon dioxide and nitrogen selected, Hibbs et al. teach carbon dioxide has a sterilizing effect on the potato pieces, with an example being 25% carbon dioxide and 75% nitrogen. However, once the sterilizing effect of carbon dioxide was known, to select any particular amount of carbon dioxide, and remaining amount of nitrogen would have been an obvious result of optimization within prior art conditions and routine optimization.

7. With respect to the particular level of oxygen, Hale is relied on as evidence of providing about 5% oxygen in a modified atmosphere package for potato pieces. Hale teaches that although removing greater than 90% of the air before filling with inert gases

Art Unit: 1761

may be most advantageous, evacuating only about 90% of the air is not only more cost effective for providing a modified atmosphere, but oxygen in the range of 1-5%, as recited in claims 7 and 9, has the added benefit of inhibiting the growth of anaerobic bacteria during storage (Abstract, Column 2, line 64 to Column 3, line 6). Therefore, it would have been obvious to include about 5% oxygen since Hale teaches including about 5% oxygen in an otherwise inert gas environment is a more cost effective way to provide a modified atmosphere since less air has to be removed, and the remaining oxygen will prevent the growth of anaerobic bacteria during storage. One would have been substituting one conventional modified.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hibbs et al. (US 5204133) in view of Manvell (US 4927653) and Hale (US 4957761) as applied to claims 3,4, 6,7,9, 10, 14 above, further in view of Humphreys et al. (GB2330817 A)

9. Hibbs et al. teach packaging inert gases but are silent in teaching sulfur dioxide or argon. Humphreys et al., who also teach storing fried potato pieces in inert gases, teach argon in combination with other inert gases such as nitrogen, carbon dioxide is an improvement in that the flavor is better maintained during storage (Abstract. Pages 2 and 3). Therefore, it would have been further obvious to include argon since it was known to improve the flavor of fried potato pieces that are stored in modified atmosphere packages, and one would have been substituting one conventional modified atmosphere for another for the same purpose: storing fried potato pieces.

10. Claims 2-4,6,7,9,11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamann et al (US 4761294) in view of Desai et al. (US5589213) and Manvell (US 4927653) and Hale (US 4957761).

11. Regarding claims 2- 4,6,7,9,11,13, 14, Hamann et al. teach a method of preparing French fried potato comprising the steps of obtaining frozen par-fried potato pieces and surface pasteurizing the potato pieces at 300°F and 450°F, in a pasteurizing apparatus, which is an impingement oven, as recited in claim 2, that raises the surface temperature and removes excess moisture (Column 2, line 29-60,Column 4, line 63 to Column 5, line18). Hamann et al. teach the surface-pasteurized potatoes are frozen and then stored under freezing conditions to inhibit bacterial growth during storage(Column 7, lines 9-29, Figure 1). However, Hamann et al. are silent in teaching the frozen par fried potato pieces are "stored", including prior to pasteurizing as recited in claim 11, and the pasteurizing apparatus has an exit into a clean room environment wherein the potato pieces are packaged in a modified atmosphere comprising about 5% oxygen, 0-15% carbon dioxide, and 0-80% nitrogen as recited in claims 3,4,7 and 9, the modified atmosphere comprising 5% oxygen, 80% nitrogen and 10-15% carbon dioxide, as well as shipping the frozen pieces to another location for pasteurizing as recited in claim 13.

12. With respect to *storing* the frozen par-fried potato pieces prior to pasteurizing, Desai et al. are relied on as evidence of the conventionality of storing frozen par fried potato pieces and obtaining frozen par fried potato pieces for further

Art Unit: 1761

treatment/packaging. Desai et al. teach this method assists in reducing operating costs by utilizing two process locations for preparing packaged fried potato pieces. One large central location completes the more expensive processes, such as receiving/treating raw potatoes and freezing/storing the par fried potato pieces, while satellite locations are utilized for obtaining the frozen par fried potato pieces and completing the less expensive final heat treatment and packaging steps, as recited in claims 7,9 ,11, and13 (Column 1, lines 5-19, Column 4, lines 16-67). Therefore, it would have been obvious to modify Hamann et al. and include storing the frozen par-fried potato pieces prior to pasteurizing and ship the pieces from one central location to another, as recited in claims 7,9 ,11, and13 since Desai et al. teach this would reduce operating costs for a company *prior to* the final heat treatment/packaging step.

13. With respect to packaging in a clean room after the pasteurizing step, Manvell, who also teaches a method of preparing French fried potato pieces for long term storage without microbial contamination, recognizes it is well known to freeze fried potato pieces to prevent microbial growth during storage, but offers an alternative that provides a longer shelf life of the completed product without freezing (Column 1, lines 9-25, Column 2, lines 25-44, Column 3, lines 40-65). Manvell is relied on as evidence of the conventionality of providing an exit from a sterilizing, or pasteurizing apparatus (i.e. raises the temperature and removes moisture like Hamann et al.), into a clean room, or aseptic environment as recited in claim 4, having a modified atmosphere, or sterile gas(Column 4, lines 65-68), wherein the pasteurized fried potato pieces are cooled, as recited in claim 3, packaged to obtain an extended shelf life prior to preparing for

consumption for several weeks or months, which would include 60 days as recited in claim 6, wherein the product has a reduced reconstitution time, as recited in claim 14 (Column 2, lines 10-15, Column 4, line 45 to Column 5, line 34, Column 6, lines 9-42, 58-67). Manvell teaches that by using aseptic packaging in a clean room after pasteurizing, the overall cost of the operation is further reduced since the distribution sites would not require freezers and during long term storage flavor is improved (Column 4, lines 1-30). Manvell further teaches packaging under aseptic condition will assure that *all* harmful and spoilage organisms are killed, as recited in claim 7, and by aseptically packaging in a modified atmosphere the pasteurized or sterilized condition (i.e. which is reached at a temperature of at least 230°F to kill all harmful and spoilage organisms) is maintained during the shelf life (Column 2, lines 25-66). Therefore, it would have been obvious to further modify the method of Hamann et al. such that the pasteurization apparatus would have an exit into an aseptic environment for aseptic packaging, as recited in claim 4, with a modified atmosphere that would extend the shelf life to 60 days as recited in claim 6, cooling the surface pasteurized fried potatoes, as recited in claim 3, with a reduced reconstitution time as recited in claim 14 since the aseptic packaging/storages method of Manvell further saves money for the steps involved *after* the final heat treatment/packaging steps, provides a longer shelf life, and does not require to be thawed prior to preparation. One would have been substituting one known method of packaging/storing fried potato pieces for another for the same purpose: storage of par-fried potato pieces until a finish-cooking step. Additionally, it would have been further obvious that the final microbial counts would be less than 1.0

log CFU/g for mold, for example, and negative for *Listeria monocytognes*, *Salmonella*, *Clostridium botulinum*, *E. coli* 0157:H7, and *Staph. Aureus* since Manvell teaches packaging under aseptic condition will assure that *all* harmful and spoilage organisms are killed, as long as the product being packaged is first heated to 230°F, which is a *lethal* temperature for microbial growth, and Hamann et al. pasteurize the pieces to temperatures of 300-450°F. One would have been substituting one method of packaging (i.e. aseptic packaging) for another for the same purpose: storage of a pasteurized fried potato piece.

14. With respect to the particular sterile gas or modified air selected, Hale also teaches preserving potato pieces, albeit not par-fried, in a modified atmosphere packaging. Hale teaches that although removing greater than 90% of the air before filling with an inert gas, such as 100% Nitrogen as recited in claims 7 and 9, is most advantageous in preserving potato pieces, evacuating only about 90% of the air is not only the most cost effective way of providing a modified atmosphere, but any oxygen remaining in the range of 1-5%, as recited in claims 7 and 9, has the added benefit of inhibiting the growth of anaerobic bacteria during storage (Abstract, Column 2, line 64 to Column 3, line 25, Column 4, lines 15-20). Therefore, it would have been obvious to include 100% nitrogen about 5% oxygen since Hale teaches including 95% nitrogen and about 5% oxygen gas environment is a more cost effective way to provide a modified atmosphere since less air has to be removed, and the remaining oxygen will prevent the growth of anaerobic bacteria during storage. One would have been

substituting one conventional modified atmosphere for another for preserving potato pieces.

15. Regarding claim 12, Hamann et al. is silent in teaching less than 24°F for obtaining frozen pieces. However, Desai et al. teaches the first freezing step (i.e. obtaining frozen par fried pieces) should be anywhere from 14 to -22°F (Column 8, lines 35-45). Therefore, it would have been obvious to select a temperature of less than 24°F since this was a conventional temperature for a frozen par fried potato piece in the "obtaining" step.

16. Claims 15-18,20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamann et al (US 4761294) in view of Manvell (US 4927653) and Burrows et al. (US 5084291) and Melvin (US 4808427)

17. Regarding claims 15-18,20, Hamann et al. teach a method of preparing French fried potato comprising the steps of washing whole potatoes, cutting the potatoes, exposing the cut potatoes to SAPP, as recited in claim 18, par frying the potatoes, freezing the par-fried potato pieces and surface pasteurizing the potato pieces at 300°F and 450°F that raises the surface temperature and removes excess moisture (Column 2, line 29-60, Column 4, lines 14-62, and Column 4, line 63 to Column 5, line 18), wherein the frozen par-fried potatoes have a moisture level of about 64%, which would be about 36% solids (Column 6, lines 34-53, Column 7, lines 3-6). Hamann et al. teach the surface-pasteurized potatoes are frozen and then stored under freezing conditions to inhibit bacterial growth during storage (Column 7, lines 9-29, Figure 1). However,

Art Unit: 1761

Hamann et al. are silent in teaching the washing step includes an antimicrobial aid such as chlorine, ozone, or oxipericetic acid, as recited in claims 15 and 16 ,at any particular temperature as recited in claim 17, pasteurizing apparatus has an exit into a clean room environment wherein the potato pieces are packaged in a modified atmosphere as recited in claim 15, and a composition of about 36% solids, 6% fat ,and 1% sodium chloride when frozen as recited in claim 15

18. With respect to packaging in a clean room after the pasteurizing step, Manvell, who also teaches a method of preparing French fried potato pieces for long term storage without microbial contamination, recognizes it is well known to freeze fried potato pieces to prevent microbial growth during storage, but offers an alternative that provides a longer shelf life of the completed product without freezing (Column 1, lines 9-25, Column 2, lines 25-44, Column 3, lines 40-65). Manvell is relied on as evidence of the conventionality of providing an exit from a sterilizing apparatus (i.e. raises the temperature and removes moisture like Hamann et al.), into a clean room having a modified atmosphere (i.e. sterile gas) as recited in claims 15 and 20(Column 4, lines 65-68), wherein the pasteurized fried potato are packaged to obtain an extended shelf life prior to preparing for consumption and a quicker preparation time than frozen potatoes(Column 2, lines 10-15, Column 4, line 45 to Column 5, line 34, Column 6, lines 9-42,58-67). Manvell teaches that by using aseptic packaging in a clean room after pasteurizing, the overall cost of the operation is further reduced since the distribution sites would not require freezers and during long term storage flavor is improved (Column 4, lines 1-30). Additionally, Manvell further teaches packaging under aseptic

condition will assure that *all* harmful and spoilage organisms are killed and by aseptically packaging in a modified atmosphere the pasteurized or sterilized condition (i.e. which is reached at a temperature of at least 230°F to kill all harmful and spoilage organisms) is maintained during the shelf life (Column 2, lines 25-66). Therefore, it would have been obvious to modify the method of Hamann et al. such that the pasteurization apparatus would have an exit into a clean room with a modified atmosphere since the aseptic packaging/storages method of Manvell saves money for the steps involved *after* the final heat treatment/packaging steps, provides a longer shelf life, and does not require to be thawed prior to preparation. One would have been substituting one known method of packaging/storing fried potato pieces for another for the same purpose: storage of par-fried potato pieces until a finish-cooking step. Additionally, it would have been further obvious to include a modified atmosphere with 0% oxygen, 0% nitrogen, and 0% carbon dioxide as recited in claim 20, since Manvell teaches including a "sterile gas" and does not limit the composition to include any particular gas.

19. With respect to the particular solids, fat, and sodium chloride level, Hamann et al. teach a non-battered potato piece with about 36% solids wherein the final fried products have a crisp exterior and tender interior (See Examples 2 in light of Example 1). Burrows et al. ,like Hamann et al., also teach frozen par fried potato pieces that have a crisp exterior and tender interior wherein the potato slices are blanched in a SAPP-containing solution. However, Burrows et al. offers an improvement on the prior art by providing a method of forming a fried potato piece that is more similar to

Art Unit: 1761

homemade by having a uniformly dispersed salty taste that is achieved by including sodium chloride in the blanching step (Column 2, lines 30-68, Column 3, lines 5-20, Column 3, line 63-Column 4, line 10). Burrows et al. teach the frozen par fried potato pieces have a solids content of 20-40%, salt content of 0.5-2% , and fat content of 1-12%, depending on the size of the piece (Column 4, lines 25-44). Therefore, it would have been obvious to modify Hamann et al. and include salt in the blanching step in an amount sufficient to provide a 1% concentration of salt in the par fried frozen pieces since this provides a uniformly distributed salt flavor and a more desirable homemade flavor. It would have been further obvious to modify the method of Hamann et al. such that any solids level of 20-40% or fat level of 1-12% would be attained since Burrows et al. teach these par fried frozen levels provide a more desirable and more homemade-like fried potato piece.

20. With respect to the washing step being completed at a temperature of 51.7-65.6°C using chlorine, ozone, or oxipericetic acid, as recited in claims 15-17, Melvin teaches a method of cleaning to reduce bacteria on unpeeled potatoes that does not damage the potato and provides a clean and dried potato, and does not require unsanitary handling equipment used in the prior art. The temperature utilized is 45-85°C and antimicrobial aid such as chlorine (i.e. hypochlorite) may be added to make the washing more efficient (Abstract, Column 1, lines 4-63 Column 2, lines 58-65 Column 8, lines 3-10). Therefore it would have been obvious to modify Hamann et al. and include the washing method of Melvin since this method reduces bacteria on a

Art Unit: 1761

potato without damage or utilizing unsanitary handling equipment, and one would have been substituting one conventional potato washing method for another.

21. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hamann et al (US 4761294) in view of Manvell (US 4927653) and Burrows et al. (US 5084291) and Melvin (US 4808427) as applied to claims 15-18 and 20 above, further in view of Street (US 5447734)

22. Modified Hamann et al. teach blanching with SAPP, but are silent in teaching passing blanched potato pieces through a potassium sorbate containing dip. Street also teaches cooked potato pieces that are stored in a modified atmosphere wherein the pieces are treated with SAPP. Street teaches SAPP is a brightener to help maintain a fresh white appearance for the cut food pieces, whereas potassium sorbate controls yeast and mold growth. In both cases Street teaches adding these ingredients to the potato pieces via a heated bath or steam in order to allow the preservatives to be distributed throughout the potato pieces, which enhances their effectiveness and extends the shelf life (Abstract, Column 3, lines 44-66). Therefore, it would have been obvious to further modify Hamann et al. and include an additional dip potassium sorbate since Street teaches adding potassium sorbate to a cooked potato piece stored in a modified atmosphere package will extend the shelf life by controlling mold and yeast growth.

23. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hamann et al (US 4761294) in view of Manvell (US 4927653) and Burrows et al. (US 5084291) and Melvin (US 4808427) as applied to claims 15-18 and 20 above, further in view of Hale (US 4957761).

24. Modified Hamann et al. include a modified atmosphere, but is silent in teaching 5.0% oxygen. Hale also teaches preserving potato pieces, albeit not par-fried, in a modified atmosphere packaging. Hale teaches that although removing greater than 90% of the air before filling with an inert gas is most advantageous in preserving potato pieces, evacuating only about 90% of the air is not only the most cost effective way of providing a modified atmosphere, but any oxygen remaining in the range of 1-5% has the added benefit of inhibiting the growth of anaerobic bacteria during storage (Abstract, Column 2, line 64 to Column 3, line 25, Column 4, lines 15-20). Therefore, it would have been obvious to include about 5% oxygen since Hale teaches including about 5% oxygen gas environment is a more cost effective way to provide a modified atmosphere since less air has to be removed, and the remaining oxygen will prevent the growth of anaerobic bacteria during storage. One would have been substituting one conventional modified atmosphere for another for preserving potato pieces.

Response to Arguments

25. Applicant's arguments with respect to the amended claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Madsen whose telephone number is (571) 272-1402. The examiner can normally be reached on 7:00AM-3:30PM M-F.

27. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

28. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0061.

Robert Madsen
Examiner
Art Unit 1761



MILTON I. CANO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700